

**Notice of Allowability**

Application No.

10/700,193

Examiner

Jennifer Doan

Applicant(s)

BERGERON ET AL.

Art Unit

2874

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 11/14/2005.
2. ☒ The allowed claim(s) is/are 1-12 and 14-16.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

*Jennifer Doan*  
JENNIFER DOAN  
PRIMARY EXAMINER

01/17/06

## EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

### *Response to Amendment*

1. Applicant's amendment filed on November 14, 2005 has been fully considered and entered.

### *Examiner's amendment*

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles E. Wands on January 17, 2006.

The application has been amended as follows:

In claim 1, line 14, please change "the first multicavity optical filter" to -- the first multicavity **variable** optical filter--.

In claim 1, line 21, please change "the broadband reflector" to - - the broadband **optical** reflector- -.

In claim 2, line 3, please change "the broadband filter" to - -the broadband optical reflector--.

In claim 3, line 3, please change "variable broadband optical filter" to -- the first multicavity variable optical filter--.

In claim 3, lines 5 and 7, please change "the broadband reflector" to -- the broadband optical reflector--.

In claim 6, line 2, please change "the broadband filter" to -- the first multicavity variable optical filter--.

In claim 6, line 3, please change "ore" to - -or--.

In claim 16, line 2, please change "the reflector" to - -the broadband optical reflector--.

In claim 16, line 4, please change "the multicavity filter" to -- the multicavity variable optical filter--.

In claim 16, line 6, please change "the broad band reflector" to -- the broadband optical reflector--.

In claim 16, line 6, please change "the filter" to -- the multicavity variable optical filter--.

### ***Reasons for Allowance***

3. Claims 1-12 and 14-16 are allowed.

4. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to disclose or reasonably suggest all the limitations recited in independent claim 1. Specifically, the prior art of record fails to disclose a wavelength tunable add/drop device for adding or dropping n channels each having different center wavelength, comprising a broadband optical reflector disposed within a

region and between layers of the multicavity variable optical filter and disposed between and spaced from planes coincident with the first light receiving surface and second light transmitting surface in combination with the other limitations of claim 1.

Claims 2-7, 12 and 16 depend from claim 1.

The prior art of record also fails to disclose or reasonably suggest a wavelength tunable add-drop device comprising the filter including a plurality of optical cavities between opposite end faces of the filter, each cavity having one or more half wave spacer layers of high or low refractive index material sandwiched between reflecting layers of material, the second reflecting region including a broadband optical reflector to all of the different channels of light, wherein the broadband optical reflector is disposed within or between one of the optical cavities in combination with the other limitations of claim 8.

Claims 9-11 depend from claim 8.

The prior art of record also fails to disclose or reasonably suggest a wavelength tunable add/drop device for adding or dropping n channels of an input signal each channel having different center wavelength, wherein the selection of the one channel to be passed or reflected depends upon a location where light is launched into one of the top and bottom ends of the first multicavity optical filter; and a broadband optical reflector directly adjacent to the multicavity optical filter and disposed between planes

coincident with the first and second surfaces in combination with the other limitations of claim 14.

Claim 15 depends from claim 14.

The examiner agrees with applicant's arguments on pages 8-16 in the remarks accompanying the amendment of November 14, 2005, and fully concurs that Scobey et al. do not disclose or suggest a wavelength tunable add/drop device for adding or dropping n channels each having different center wavelength with all limitations as defined above.

Claims 1-12 and 14-16 are therefore allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JENNIFER DOAN  
PRIMARY EXAMINER

JD

January 17, 2005